

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU03/00018

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>					
Int. Cl. <sup>7</sup> : G01V 15/00, G09F 3/02, G01N 31/22					
According to International Patent Classification (IPC) or to both national classification and IPC					
<b>B. FIELDS SEARCHED</b>					
Minimum documentation searched (classification system followed by classification symbols)					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI, JAPIO: keywords: barcode, bar code, marking, identifier, tag, label, code; chang+; number, value, numer+; color, colour; pressure; read, scan, sense, detect, verify, monitor; circuit; time, store; current, voltage; cell, battery, power source, capacitor; antenna; tamper, damage, interfere, unauthorised, contaminate, meddle; film, layer; gap, slit, opening, aperture, slot, window; light coloured, dark, foreground, background, contrast, shaded, black, white, coat, print; (light or white) with line; machine.					
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
X Y	EP 1055919 A1 (TOSHIBA TEC KABUSHIKI KAISHA) 29 November 2000 See abstract, paras [0025], [0028], [0036], fig 7	1-25, 34-38 33			
X Y	US 6190610 B1 (GOLDSMITH et al) 20 February 2001 See abstract, col 3 lines 16-34, col 4 lines 17-19, col 6 lines 25-29, col 7 lines 1-15, figs 7-10	1-25, 34-38 33			
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex					
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 33%; vertical-align: top;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p> </td> <td style="width: 33%;"></td> </tr> </table>			<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>	
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>				
Date of the actual completion of the international search 17 February 2003		Date of mailing of the international search report 21 FEB 2003			
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  <b>RAJEEV DESHMUKH</b> Telephone No : (02) 6283 2145			

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 89/05761 A1 (LARSSON) 29 June 1989 See abstract, page 6 lines 17-31, figs 6A-6C	1-25, 34-38 33
X Y	US 4996104 A (NICHOLAS et al) 26 February 1991 See abstract, col 4 line 56 - col 5 line 5, fig 6	1-25, 34-38 33
X Y	WO 00/20863 A1 (VERSEAU GROUP) 13 April 2000 See abstract, page 8 lines 22-28, figs 4A, 4B	1-25, 34-38 33
X Y	US 5254473 A (PATEL) 19 October 1993 See abstract, col 8 line 61 - col 9 line 12	1-25, 34-38 33
X Y	EP 117390 B1 (LIFELINES TECHNOLOGY INC) 5 September 1990 See page 2 lines 5-6, page 5 lines 8-15, figs 1-5	1-25, 34-38 33
X	US 4685578 A (DUNSHEE) 11 August 1987 See whole document	1, 9, 11, 34-38
X Y	DE 4303035 A1 (ZAHN) 4 August 1994 See col 1 lines 30-45	32 33
A	US 4791284 A (LUDDEN) 13 December 1988 See whole document	32
A	US 4902244 A (ENDO et al) 20 February 1990 See whole document	32
	For the Y indications, DE 4303035 A1 can be combined with any one of the other Y indicated citations with relevance to claim 33.	

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**Box I** Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos :  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos :  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box II** Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See Supplemental Box.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant's protest.

☒ No protest accompanied the payment of additional search fees.

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**Supplemental Box**

(To be used when the space in any of Boxes I to VIII is not sufficient)

**Continuation of Box No: II**

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that, a priori, there are two inventions:

1. Claims 1 to 31 and 34 to 38 are directed to an identifier comprising at least two machine readable components, wherein at least one component is capable of changing in response to a stimulus. It is considered that a change in a component in response to a stimulus comprises a first "special technical feature".
2. Claims 32 and 33 are directed to an identifier formed by applying a light coloured material over a dark coloured surface such that gaps in the light coloured material form a machine readable code. It is considered that the overlaying of the different coloured materials to form a code comprises a second "special technical feature".

Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept, a priori. As the search for the second invention required more than a little additional search effort over that for the first invention, an additional search fee is warranted.

Furthermore, the International Searching Authority has identified that there are several other inventions within the first main invention listed above. These inventions have been searched without extra charge. The different inventions are as follows:

- 1a. Claim 10 is directed to an identifier wherein the stimulus is a change in temperature.
- 1b. Claim 11 is directed to an identifier wherein the stimulus is a change in pressure.
- 1c. Claim 12 is directed to an identifier wherein the stimulus is a change in electric current.
- 1d. Claim 13 is directed to an identifier wherein the stimulus is a change in electromagnetic field.
- 1e. Claim 14 is directed to an identifier wherein the stimulus is a change in light.
- 1f. Claim 15 is directed to an identifier wherein the stimulus is a change in chemical composition.
- 1g. Claim 16 is directed to an identifier wherein the stimulus is exposure to certain gases or vapours.
- 1h. Claim 17 is directed to an identifier wherein the stimulus is exposure to certain liquids, emulsions or slurries.
- 1i. Claim 18 is directed to an identifier wherein the stimulus is exposure to certain solids.
- 1j. Claim 19 is directed to an identifier wherein the stimulus is a change in time or an indirect consequence of a change in time.

These groups are not so linked as to form a single general inventive concept, that is, they do not have any common inventive features, which define a contribution over the prior art. It is considered that identifiers responding to the different stimuli as listed above, all constitute different inventive concepts. The common concept linking together these groups of claims is an identifier as claimed in claim 1. However, this concept is not novel in the light of many patent documents (see for example any of the documents cited against claim 1 in Box C 'Documents considered to be relevant'). Therefore these claims lack unity a posteriori.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
EP	1055919	JP	2001041829
US	6190610	AU	45931/97
		NO	991505
		US	6270724
		WO	9814777
		CN	1123572
		JP	2002040012
		US	5306466
WO	8905761	AU	27971/89
US	4996104	EP	250217
WO	200020863	EP	1119771
US	5254473	WO	9412858
EP	117390	AU	23272/84
		JP	59163543
US	4685578	NONE	
DE	4303035	NONE	
US	4791284	AU	24395/88
		US	4879457
US	4902244	GB	2224167
		DE	3836827
		JP	1294384
		EP	929806
		NZ	334955
		US	2002072079
		AU	68353/94
		EP	699304
		NO	954604
		WO	9427144
		EP	1006358
		NZ	505583
		US	6479016
		CA	2161435
		FI	955572
		NZ	266717
		US	5869341
		SE	8705114
		GB	2191858
		US	6361962
		AU	25762/88
		CA	1204300
		GB	2211630
END OF ANNEX			